BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA



A2103009

In the Matter of the Application of Starlink Services, LLC for a certificate of public convenience and necessity to operate as a full facilities-based and resale competitive local exchange carrier throughout the service territories of Pacific Bell Telephone Company, Frontier California, Inc., Frontier Communications of the Southwest, Inc., Consolidated Communications of California Company, and Citizens Telecommunications Company of California, Inc. and full facilities-based and resale interexchange carrier on a statewide basis, and for designation as an Eligible Telecommunications Carrier.

A.

APPLICATION OF STARLINK SERVICES, LLC

[PUBLIC VERSION]

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Dated: March 15, 2021

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In the Matter of the Application of Starlink Services, LLC for a certificate of public convenience and necessity to operate as a full facilities-based and resale competitive local exchange carrier throughout the service territories of Pacific Bell Telephone Company, Frontier California, Inc., Frontier Communications of the Southwest, Inc., Consolidated Communications of California Company, and Citizens Telecommunications Company of California, Inc. and full facilities-based and resale interexchange carrier on a statewide basis, and for designation as an Eligible Telecommunications Carrier.

A.

APPLICATION OF STARLINK SERVICES, LLC

Pursuant to Article I of Chapter 5 of the Public Utilities Code (Section 1001 et seq.), Starlink Services, LLC ("Starlink Services" or "Applicant") hereby requests that the Commission issue a certificate of public convenience and necessity ("CPCN") authorizing Applicant to operate as: (i) a full facilities-based and resale competitive local exchange carrier throughout the service territories of Pacific Bell Telephone Company, Frontier California, Inc., Frontier Communications of the Southwest, Inc., Consolidated Communications of California Company, and Citizens Telecommunications Company of California, Inc.; and (ii) a full facilities-based and resale interexchange carrier on a statewide basis. In addition, Starlink Services seeks designation as an Eligible Telecommunications Carrier ("ETC") pursuant to

Resolution T-17002, Resolution T-17693, and 47 U.S.C. § 214(e) in specified areas of California.¹

I. <u>Introduction and Request for Expedited Approval</u>

Starlink Services is a wholly-owned subsidiary of Space Exploration

Technologies Corp. ("SpaceX"). SpaceX was selected by the Federal Communications

Commission ("FCC") as a winning bidder in the Rural Digital Opportunity Fund ("RDOF")

auction (Auction 904) to receive \$5,746,960 in funding over a period of ten years to provide satellite broadband and Voice-over-Internet Protocol ("VoIP") in certain unserved or underserved areas of California.² On December 22, 2020, pursuant to procedures developed by the FCC, SpaceX assigned its winning bids to Starlink Services.

The FCC determined that the deployment of the services supported by the RDOF will advance the goal of ensuring "continued and rapid deployment of broadband networks to unserved Americans." Indeed, such support will allow Starlink Services to accelerate service for those who need it most and prioritize deployment to underserved areas.

In order to qualify to receive funding under the RDOF program, Starlink Services must be designated by this Commission as an ETC, which, under Commission policy, requires

¹ Resolution T-17002 and Resolution T-17693 specify that requests for ETC designation should be made through an advice letter submitted to the Communications Division. Starlink submitted an advice letter to the Communications Division on January 5, 2021, requesting ETC designation. However, the Communications Division has advised Starlink Services to seek such designation along with its request for a CPCN in a single, combined application.

² See Rural Digital Opportunity Fund Phase I Auction (Auction 904) Closes; Winning Bidders Announced, AU Docket No. 20-34, WC Docket Nos. 19-126, 10-90, DA 20-1422 (Dec. 7, 2020) ("RDOF Winning Bidder PN").

³ See Rural Digital Opportunity Fund Phase I Scheduled for October 29, 2020; Notice and Filing Requirements and Other Procedures for Auction 904, Public Notice, AU Docket No. 20-34, WC Docket Nos. 19-126, 10-90, 35 FCC Rcd. 6077, para. 81 (June 9, 2020), at para. 5.

that Starlink Services hold a CPCN. Therefore, by this combined application, Starlink Services is seeking both a CPCN and designation as an ETC.

The FCC has established June 7, 2021 as the deadline for RDOF participants to obtain ETC designation. While Starlink Services will seek an extension from the FCC of this deadline if necessary, there is no certainty that an extension will be granted or that, if granted, it will be of sufficient duration to accommodate prolonged review by the Commission of this application. Therefore, Starlink Services respectfully requests that the Commission approve this Application on a highly-expedited basis to help assure that Starlink Services will have the opportunity to provide services to the underserved areas of the state for which the RDOF funding is currently intended.

II. <u>Information Regarding Applicant - Rule 2.1(a)</u>

Starlink Services' full legal name is Starlink Services, LLC. Starlink Services is a Delaware limited liability company, with its principal place of business being located at 1 Rocket Road, Hawthorne, California 90250. Its telephone number is 310-363-6000.

As noted, Starlink Services is a wholly-owned subsidiary of SpaceX, which designs, manufactures, and launches the world's most advanced rockets, spacecraft, and satellites, and now offers broadband service over the world's largest satellite constellation.

III. Contact for Correspondence and Communications - Rule 2.2(b)

All communications, correspondence, and pleadings with respect to this application should be directed to:

John L. Clark Goodin, MacBride, Squeri & Day, LLP 505 Sansome Street, Suite 900 San Francisco, CA 94111 Telephone: (415) 392-7900

(415) 398-4321 E-mail: jclark@goodinmacbride.com

with copies to:

Facsimile:

R. Edward Price Senior Counsel Space Exploration Technologies Corp. 1155 F Street N.W., Suite 475 Washington, D.C. 20004

Telephone: (585 455-6872 Email: Ted.Price@spacex.com

IV. Categorization, Need for hearing, Issues, Schedule - Rule 2.1(c)

Proposed Category: Starlink Services proposes that the Commission classify this proceeding as ratesetting. Although this Application does not affect rates, the definitions of "adjudicatory" or "quasi-legislative" clearly do not apply to this application. Under the Commission's rules, when a proceeding does not clearly fit any of the categories, it should be conducted under the ratesetting procedures. (See Rule 7.1(e)(2).)

Need for hearing: No hearing is needed for the Commission to act on Starlink Services' request.

Issues to be considered: Starlink Services submits that the only issues to be resolved in this proceeding are whether Starlink Services has met the Commission's requirements for authorization to provide the proposed services and for designation as an ETC, specifically:

(1) Whether Starlink Services has demonstrated sufficient technical and managerial ability to conduct the proposed operations;

- (2) Whether Starlink Services has met the requisite financial showing required of applicants;
- (3) Whether Starlink Services' proposed operations will serve the public convenience and necessity;
- (4) Whether Starlink Services meets the Commission's requirements for designation as an ETC; and
- (5) Whether designation of Starlink Services as an ETC is in the public interest.

Starlink Services submits that the information in this Application fully demonstrates that Starlink Services meets all of the requirements for issuance of the requested operating authority and designation as an ETC and that no further filings or proceedings are required.

<u>Proposed Schedule:</u> Starlink Services respectfully urges the Commission to act on its application as quickly as practicable, in accordance with the following schedule:

April 2021 - Final date for protests (thirty days after filing).

April-May 2021 - Prehearing conference; scoping memo issued; application deemed submitted, and thereafter granted.

V. Other Information - Rule 2.1(d)

(1) Technical and Managerial Qualifications

Starlink Services will rely on the significant managerial and technical expertise of SpaceX in delivering service to consumers. SpaceX has over 8,000 employees in the United States, based at the Company's headquarters in Hawthorne, California, and at facilities across the country. Under the guidance of the SpaceX management team, Starlink Services is already deploying an extensive gateway infrastructure network designed to allow service in major

markets across the country and will leverage that experience and expertise to bring its services to the under-served rural areas of California for which it has been selected by the FCC as an RDOF grantee.

Resumes for the members of Starlink Services' management team are included in Exhibit A. These resumes clearly demonstrate that Starlink Services possesses the managerial and technical expertise required to engage in its proposed operations in California.

(2) Fitness

Attached as Exhibit B is a sworn statement submitted pursuant to Ordering Paragraph 14 of D.13-05-035.

(3) Exemptions

Starlink Services will operate as a non-dominant carrier. Therefore, Starlink Services requests that it be accorded the same streamlined regulatory treatment previously accorded to other competitive local carriers as set forth in D.97-01-015 and as adopted for non-dominant interexchange carriers, including, without limitation, the following: exemption from the provisions of Public Utilities Code §§ 816-830 (pertaining to the issuance of stocks and securities) and Public Utilities Code § 851 (pertaining to the transfer or encumbrance of utility assets when such transfer or encumbrance is for the purpose of securing debt), and exemption from any requirement to maintain its books and records in accordance with the Uniform System of Accounts specified in 47 CFR Part 32.

(4) Performance Bond

Included as part of the Verification of this Application is a sworn statement submitted pursuant to Ordering Paragraph 4 of D.13-05-035, attesting that Starlink Services will comply with the performance bond requirement established by that decision.

VI. Organization and Qualification to Transact Business - Rule 2.2

A copy of Starlink Services' certificate of formation and a current certificate of status (good standing certificate) issued by the California Secretary of State are attached as Exhibit C.

VII. CEQA Compliance - Rule 2.4

Starlink Services will largely rely on SpaceX's fleet of satellites and existing terrestrial infrastructure to provide its services, but will need to construct or install certain additional telecommunications facilities to support its operations. Starlink Services expects that any outside plant construction would be relatively small in scale, consisting of installation or construction of relatively short conduit routes and other structures, such as satellite gateways (earth stations), in previously-developed and disturbed areas. Thus, Starlink Services expects that any such projects would fall within one or more categorical exemptions under the California Environmental Quality Act ("CEQA").⁴

Accordingly, Starlink Services proposes that the requested grant of full facilities-based construction authority be subject to compliance with the same expedited 21-day environmental review process that has been adopted for similarly-situated carriers.⁵ This process would be as follows:

- Applicant shall provide the Commission's Energy Division with:
 - A detailed description of the proposed project, including:
 - Customer(s) to be served;

⁴ Available exemptions may include, inter alia, construction projects involving existing facilities (CEQA Guidelines Section 15301), replacement or reconstruction (CEQA Guidelines Section 15302), new construction or conversion of small structures (CEQA Guidelines Section 15303), and construction under other available exemptions.

⁵ *See, e.g.*, Decision 13-07-032, which granted full-facilities-based authority to Vodex Communications Corporation.

- The precise location of the proposed construction project; and
- Regional and local site maps.
- A description of the environmental setting, including at a minimum:
 - Cultural, historical, and paleontology resources;
 - Biological resources; and
 - Current land use and zoning.
- A construction work plan, including:
 - Commission Preconstruction Survey Checklist-Archaeological Resources;
 - Commission Preconstruction Survey Checklist-Biological Resources;
 - A detailed schedule of construction activities, including site restoration activities;
 - A description of construction/installation techniques;
 - A list of other agencies contacted with respect to siting, land use planning, and environmental resource issues, including contact information; and
 - A list of permits required for the proposed project.
- A statement of the CEQA exemption(s) claimed to apply to the proposed project; and
- Documentation supporting the finding of exemption from CEQA.
- The Commission's Energy Division shall then review the submittal and shall notify Applicant of either its approval or its denial of Applicant's claim for exemption from CEQA review within 21 days from the time that Applicant's submittal is complete.
- If the Commission's Energy Division approves Applicant's claimed CEQA exemption(s), the staff shall prepare a Notice to Proceed (NTP) and file a Notice of Exemption with the State Clearinghouse, Office of Planning and Research.
- If the Commission's Energy Division disapproves Applicant's claimed CEQA exemption(s), the staff shall issue to Applicant a letter which states the specific reasons that the claimed CEQA exemption(s) do not apply to the proposed project.
- If the Commission's Energy Division disapproves Applicant's claimed CEQA exemption(s) and Applicant wishes to pursue the project,

Applicant shall either re-design the specific project and facilities and then reapply for a finding of exemption from CEQA, or file a formal application with the Commission seeking the requisite approval and full CEQA review, before commencing any full facilities-based construction activities.

Starlink Services proposes, further, that, at such time as General Order ("G.O.") 170 is implemented, Starlink Services be authorized to exercise full-facilities-based authority in accordance with the applicable provisions of G.O. 170, rather than pursuant to the foregoing 21-day expedited review process.

Starlink Services' Proponent's Environmental Assessment ("PEA") is attached as Exhibit D.

VIII. Description of Proposed Construction - Rule 3.1(a)

Starlink Services intends to install satellite gateways (earth stations) and telecommunications facilities (such as conduit and fiber optic cabling) for middle-mile terrestrial transport of communications, including VoIP and broadband data, to and from consumers of its satellite-based services.

IX. List of Competitors, Cities, and Counties - Rule 3.1(b)

Pursuant to Decision No. 97-06-107, applications such as this are exempt from the requirements of this rule.

X. <u>Map - Rule 3.1(c)</u>

A map illustrating the area in which Starlink seeks operating authority is attached hereto as Exhibit E. This map depicts the service areas of the incumbent local exchange carriers within whose territory Starlink Services may operate as a competitive local carrier. The areas identified on the map as "Verizon California" areas are now served by Frontier California Inc. as successor to Verizon California Inc. The area identified on the map as the "SureWest" area is now served by Consolidated Communications of California Company as successor to SureWest

Telephone. This map is also available online at

http://www.cpuc.ca.gov/uploadedImages/CPUC_Public_Website/Content/Utilities_and_Industries/Communications -

<u>Telecommunications_and_Broadband/Consumer_Programs/Broadband_Availability/ILEC%20_</u>

<u>Territory%20in%20CA%20-%202014.jpg</u>

Starlink Services currently intends to offer its VoIP and satellite broadband services only within the census blocks for which it was selected to be a recipient of RDOF funds. These census blocks constitute the area for which Starlink Services is seeking ETC designation, as described below in Section XVIII of this Application.

XI. Permits - Rule 3.1(d)

No discretionary franchises or health or safety permits will be required for the provision of the services described herein. Starlink Services will abide by all applicable local permitting requirements in carrying out any construction activities.

XII. Public Convenience and Necessity - Rule 3.1(e)

Grant of the requested CPCN will serve the public interest by allowing Starlink Services to deploy its facilities and provide its services in the areas for which the FCC has selected Starlink Services as a winning RDOF bidder. As noted previously, the FCC has determined that the voice and broadband services Starlink Services will deploy using RDOF support will advance the goal of RDOF to "ensure continued and rapid deployment of broadband networks to unserved Americans." RDOF support will allow Starlink Services to accelerate service for those who need it most, and prioritize deployment to underserved areas.

⁶ See Rural Digital Opportunity Fund Phase I Scheduled for October 29, 2020; Notice and Filing Requirements and Other Procedures for Auction 904, supra, at para. 5.

Specifically, Starlink Services will offer California consumers uninterrupted high speed, low latency services in underserved areas where the build-out of purely terrestrial services may not be economically justifiable. Under the terms of the RDOF program, Starlink Services will hold back a portion of its system capacity that could otherwise be sold to locations outside of the RDOF program, so that high-quality internet service can be provisioned to any consumer in the supported census blocks within ten days of their submission of a service order.

Starlink Services notes, further, that Commission approval of this Application will reaffirm the Commission's long-standing policy to promote competition in the telecommunication market within California and thereby further the public interest by increasing the availability of innovative, high quality service.

XIII. Estimated Cost of Construction; Feasibility - Rule 3.1(f)

Any construction activities undertaken by Starlink Services will be funded through financing made available to it under the RDOF program and through private sources, through operations, or other sources that may become available from time to time.

XIV. Financial Ability and Financing Information - Rule 3.1(g)

Starlink Services has submitted under seal as Exhibit F to this application a guaranty from Starlink Services' parent, SpaceX, supported by audited financial statements and unaudited, updated financial statements, which demonstrates that Starlink Services will have access to otherwise uncommitted cash resources in an amount of at least \$100,000 for use in meeting its working cash requirements while this application is pending and during the first full year of operations under the requested authority.

Starlink Services will not be required to pay any deposits in order to provide its proposed services.

XV. Statement of Proposed Rates - Rule 3.1(h)

Starlink Services will provide voice services using VoIP technology.

Accordingly, no tariff is required under the Commission's current rules.

XVI. General Order 104-A - Rule 3.1(i)

Neither Starlink Services nor its parent is a publicly-traded company. Further, none of Starlink Services' officers, directors, or affiliates has a material financial interest (as that term is defined in Section 2 of G.O. 104-A) in any past or proposed transaction involving the purchase of materials or equipment, or the contracting, arranging, or paying for construction, maintenance, or service with respect to any construction proposed in this Application.

XVII. Number of Customers - Rule 3.1(j)

Starlink Services estimates that its VoIP services will be provided to 400 customers during the first year of operations and 1,500 customers during the fifth year of operations.

XVIII. Request for ETC Designation

As demonstrated below, Starlink Services meets the requirements for ETC designation and such designation will serve the public interest.

(1) Background on SpaceX and Starlink Services

SpaceX is a private American company founded in 2002 by Elon Musk to revolutionize space technologies. SpaceX is leveraging its proven track record of rapid innovation and experience building rockets and spacecraft to deploy Starlink, a space-based broadband internet system capable of providing truly low-latency, high-throughput service in even the most remote areas of the country. This service is ideal for bringing broadband and VoIP to underserved rural areas in the United States. Since the grant of its FCC satellite authorization in 2018, SpaceX has successfully deployed the largest satellite constellation in

history and demonstrated its ability to deliver high-quality internet to thousands of users. This kind of swift execution, engineering excellence, and rapid innovation is foundational to SpaceX and is one of SpaceX's core competencies.

The FCC authorized SpaceX in 2018 to deploy and operate Star Link, a revolutionary constellation of more than 4,400 Non-Geostationary Orbit ("NGSO") satellites in low Earth orbit ("LEO"). The FCC based its decision on the ability of SpaceX "to bring high-speed, reliable, and affordable broadband service to consumers in the United States and around the world, including areas underserved or currently unserved by existing networks." ⁷ Then-FCC Chairman Pai further explained that the FCC moved quickly to license systems such as SpaceX's network because it can "deliver fast, low-latency broadband services to millions in the United States and around the world." Starlink Services wholeheartedly agrees with Chairman Pai that Starlink "meshes well with the FCC's twin goals of closing the digital divide and promoting innovation."

Starlink Services and SpaceX are bringing to bear SpaceX's successful history of design innovation, manufacturing capability, and ability to operationalize complex space and ground systems ¹⁰ in order to create a U.S.-based manufacturing capability for Starlink satellites,

⁷ In re Space Exploration Holdings, LLC Application for Approval of Orbital Deployment and Operating Authority for the SpaceX NGSO Satellite System, Memorandum Opinion, Order and Authorization, 33 FCC Red, 3391, para. 1 (2018).

⁸ Remarks of FCC Chairman Ajit Pai, U.S. Chamber of Commerce Policy Roundtable on Small Satellite Integration (July 9, 2019).

⁹ *Id*.

¹⁰ The success of Starlink is built on a deep history of technical innovation and engineering know-how at SpaceX. Since its inception, SpaceX has leveraged American innovation, technical savvy, and its integrated, iterative culture to solve the most ambitious challenges in launch and spacecraft design. SpaceX has demonstrated unmatched speed-to-market and it has delivered on its promises of next-generation satellite broadband. Through SpaceX's Falcon family of launch vehicles, it has successfully launched 111 times and is relied upon by the Department of Defense and the National Aeronautics and

customer premises equipment, and ground station antennas. The result is the creation of a comprehensive ground network that currently communicates with over 1,200 Starlink satellites deployed, enabling SpaceX to commence beta service with thousands of users across multiple states and in some international locations. Starlink's technical maturity and inherent capacity to support high- throughput, low-latency broadband service to underserved communities in even the most remote and rural areas of the United States promises to materially contribute to closing the digital divide. SpaceX and Starlink Services are proud to be able to contribute to the United States in this manner.

With more than 1,200 satellites deployed, SpaceX has launched sufficient satellites in volume to provide continuous coverage to large parts of the United States and is expanding the size of its constellation rapidly to provide coverage over the entire country. SpaceX has already deployed ground equipment to support initial broadband operations in desired locations. SpaceX is currently offering select users beta consumer-grade broadband service in Washington, Montana, Minnesota, Oregon, Michigan, Idaho, Wisconsin, Maine, and North Dakota. Currently, Starlink beta users are selected to validate technical, operational, and business system readiness ahead of a broader public beta service roll-out.

(2) SpaceX's Participation in the RDOF and Assignment of Winning Bids to Starlink Services

On January 30, 2020, the FCC established the RDOF to ensure continued and rapid deployment of broadband networks to underserved Americans. The RDOF will commit up to \$20.4 billion over ten years to support the availability of high-speed broadband networks in rural America. RDOF Phase 1 targeted areas wholly unserved by 25/3 Mbps broadband.

Space Administration for their critical launch needs. The world's leading commercial satellite manufacturers and operators also rely on SpaceX for launch of their satellites.

Support was awarded through a reverse auction that favored faster services with lower latency.

Auction participants submitted bids based on a combination of performance and latency requirements.

The Phase 1 auction concluded on November 25, 2020 and awarded a total of \$9.23 billion in support over ten years. SpaceX was awarded \$885 million of this support to provide broadband and standalone voice services in 35 states, including \$5,746,960 in California. On December 22, 2020 pursuant to the processes established by the FCC, SpaceX assigned its winning bids to Starlink Services.

In addition to receiving an ETC designation from each relevant state authority (or from the FCC if the state disclaims jurisdiction) by June 7, 2021,¹² all RDOF winning bidders are required to commercially offer voice and broadband service consistent with certain milestones and speed and latency requirements. RDOF recipients must offer service to 40% of the awarded locations statewide by the end of the third full calendar year following funding authorization, and 20% each year thereafter, resulting in 100% deployment to funded locations by the end of the sixth calendar year.¹³

(3) Star Link Services Network Architecture

A dramatic revolution in cost-effective, reusable launch services—a capability

SpaceX has developed and maintains in-house—has enabled SpaceX to deploy a space-based system at the scale necessary to match the capabilities of terrestrial broadband providers, meeting

¹² Rural Digital Opportunity Fund Phase I Auction Scheduled for October 29, 2020; Notice and Filing Requirements and Other Procedures for Auction 904, Public Notice, AU Docket No. 20-34, WC Docket Nos. 19-126, 10-90, 35 FCC Rcd 6077, para. 81 (June 9, 2020) ("RDOF Auction Procedures PN"); RDOF Winning Bidder PN, para. 36.

¹¹ See RDOF Winning Bidder PN, supra.

¹³ Rural Digital Opportunity Fund et al., WC Docket No. 19-126 et al., Report and Order, 35 FCC Rcd 686, 696, para. 45 (2020) ("Rural Digital Opportunity Fund Order")

current demand with high throughput and low-latency broadband that can address the full range of internet use cases, particularly for underserved areas.

As noted above, SpaceX provides internet services via its NGSO constellation of satellites that operate in LEO. To date, SpaceX has conducted 21 Star Link launches deploying more than 1,200 satellites. SpaceX can comfortably rely on its current authorization from the FCC to operate its NGSO constellation consisting of 4,408 satellites, which provides broadband service using Ku- and Ka-band spectrum. As depicted below, SpaceX has launched a sufficient number of satellites to provide uninterrupted coverage to the northern United States.

SpaceX has sufficient parts on hand and launches on manifest to deploy the remaining satellites needed for uninterrupted coverage over the majority of the United States in the coming months. SpaceX aims to achieve total coverage of the contiguous United States and Hawaii in 2021.

Starlink Services will leverage these achievements, the Starlink constellation, and associated ground equipment to provide service to end users.



Figure 1 - Starlink Coverage Map

Starlink Services will use Starlink satellites to provide IP connectivity between customer premises equipment (over its licensed Ku-band spectrum) and its gateways (over its licensed Ka-band spectrum). Aggregate consumer data travels via terrestrial fiber from regional gateway sites to internet Points of Presence ("PoPs") where traffic enters into the internet. The diagram below summarizes these components of the network.

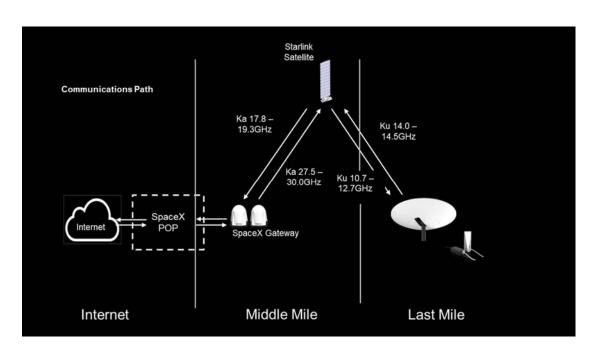


Figure 2 - Starlink Network Architecture

Unlike traditional satellite broadband services, SpaceX designed every component of its network—the gateway antennas, the customer premises equipment, the software, and even the satellites themselves—for upgradability and scalability. The Starlink constellation leverages proven beam-forming and beam-steering capabilities to direct Ku-band beams to specific ground locations in targeted geographic areas called "cells." Because the satellite's beam covers a much smaller geographic footprint than traditional satellite internet services, Starlink Services can allocate and manage capacity and throughput characteristics to a defined group of consumers in a

more precise manner. Starlink Services' ability to closely manage traffic resembles a terrestrial-deployed network.

Starlink Services' network architecture has no significant variations by state, region, or other criteria where it has gateway sites and PoPs already in place, beyond standard regional configurations for standalone voice services such as localized phone numbers and emergency service integrations. Starlink Services may also offer different language support dependent on the region served. SpaceX has also applied to the FCC to deploy a next-generation system that will meet future surges in broadband demand, which will similarly be available for Starlink Services' use.

(4) Starlink Services Meets the Statutory and Regulatory Requirements for ETC Designation

Starlink Services meets all applicable federal and state requirements for designation as an ETC, including 47 U.S.C. §214(e), 47 C.F.R. § 54.201, *et seq.* and Commission Resolution T-17002 and Resolution T-17693.

a. Starlink Services' ETC Service Area.

Starlink Services requests ETC designation for the area encompassing the census blocks for which it has been provisionally awarded RDOF support, as identified in Exhibit G.

b. Starlink Services Meets All Federal Requirements for ETC Designation.

i. <u>Starlink Services Will Offer Supported Services, on a Common Carrier Basis, Throughout the Proposed Service Area.</u>

For purposes of this designation, Starlink Services will provide broadband internet access service and standalone voice service to the public throughout the ETC Service Area on a common carrier basis. Starlink Services is a common carrier for purposes of 47 U.S.C. § 214(e)(1) and 47 C.F.R. § 54.201(d).

ii. <u>Starlink Services Will Offer Supported Services</u> <u>Using Its Own Facilities.</u>

Pursuant to 47 C.F.R. § 54.201(d)(1), Starlink Services will satisfy the requirement for offering the services supported by RDOF throughout the ETC Service Area using a combination of owned and leased facilities. As described above, SpaceX is a facilities-based satellite provider with its own fleet of satellites, earth stations, gateways, switching facilities, and other associated facilities and, therefore, Starlink Services will offer the supported services using its own facilities or a combination of its own facilities and resale of another carrier's service.

iii. <u>Starlink Services Will Offer Voice Telephony</u> Service.

Pursuant to 47 C.F.R. § 54.101(a)(1) and (b), Starlink Services will provide voice telephony services, including: (a) voice-grade access to the public switched telephone network ("PSTN") or its functional equivalent; (b) minutes of use for local service provided at no additional charge to end users; (c) access to emergency services; and (d) toll limitation services to qualifying low-income consumers in accordance with 47 C.F.R. §§ 54.500, *et seq.* Starlink Services will offer voice services on a standalone basis at rates that are reasonably comparable to urban rates.

1. Starlink Services Will Provide Voice-Grade Access to the Public Switched Telephone Network.

Pursuant to 47 C.F.R. § 54.101(a), Starlink Services will provide voice-grade access to the PSTN by providing interconnected VoIP. Starlink Services is exploring avenues for the provision of voice services consistent with the requirements and goals of RDOF, including using a white-label managed service provider ("MSP") voice platform that Starlink Services has certified to meet quality and performance standards exceeding those required by

RDOF. In this baseline plan, Starlink Services would provide telephone services connecting consumers to its MSP's platform using its network capacity, which is available to consumers through their customer premises equipment. Consumers will have the option of using a third-party, conventional phone connected to a Session Initiation Protocol ("SIP") standards-compliant analog terminal adaptor or a native-IP Phone selected from a list of certified models.

The MSP solution represents Starlink Services' baseline plan for a standalone voice service offering. Starlink Services continues to assess integrating alternative standalone voice applications into the Starlink network, including other third-party providers, or possibly developing its own proprietary solution. Starlink Services may adopt such approaches in the event that further testing demonstrates alternative solutions would provide a superior experience to the end customer, or, if StarlLink Services determines the end user would benefit from the existence of multiple voice solutions to introduce competition and redundancy into the supply chain – all while fully complying with RDOF and ETC requirements.

The FCC, in its *USF/ICC Transformation Order*, made clear that eligible voice telephony services under Section 54.101(a) include the provision of voice service "over any platform, including the PSTN and IP networks." The FCC further has explained that "a broadband provider may satisfy its voice obligation by offering voice service through an affiliate or by offering a managed voice solution (including VoIP) through a third-party vendor." Starlink Services will provide interconnected VoIP throughout the ETC Service Area, sufficient for voice-grade access to the PSTN pursuant to Section 54.101(a).

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¹⁴ Connect America Fund et al., Report and Order and Further Notice of Proposed Rulemaking, 26 FCC Rcd. 17663, 17685, para. 78 (2011) ("USF/ICC Transformation Order").

¹⁵ See WCB Reminds Connect America Fund Phase II Applicants of the Process for Obtaining Federal Designation as an Eligible Telecommunications Carrier, WC Docket Nos. 09-197, 10-90, Public Notice, DA 18-714, at 3-4 (rel. July 10, 2018) ("FCC ETC Procedures Notice")

2. Starlink Services Will Provide Local Usage at No Additional Charge.

As part of the voice-grade access to the PSTN, an ETC must provide minutes of local service at no additional charge to end-users. The FCC has not specified a minimum amount of local usage that an ETC must offer. Starlink Services will offer voice rate plans in the ETC Service Area that include local calling at no additional charge and will comply with any and all minimum local usage requirements adopted by the FCC or states with jurisdiction over Starlink Services' standalone voice service.

3. Starlink Services Will Provide Access to Emergency Services.

ETCs are required to provide access to the emergency services provided by local government or other public safety organizations, such as 911 and enhanced 911, to the extent the local government and other public safety organizations in an ETC's service area have implemented 911 or enhanced 911 systems. Starlink Services will satisfy this requirement by providing 911 and E911 for all of its customers to such extent.

4. Starlink Services Will Offer Toll Limitation Services for Qualifying Low-Income Consumers.

In its *Lifeline and Link Up Reform Order*, the FCC explained that toll limitation would no longer be deemed a supported service as of 2014.¹⁶. Accordingly, Starlink Services will not seek reimbursement for toll limitation services. Starlink Services currently has no Lifeline customers because only carriers designated as an ETC can participate in the Lifeline program. Once designated as an ETC, however, Starlink Services will participate in Lifeline, as

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¹⁶ In the Matter of Lifeline and Link Up Reform and Modernization, et. al., WC Docket No. 11-42, Report and Order, FCC 12-11, para. 229 (Feb. 6, 2012).

required by the FCC's rules, and will provide toll blocking service in accordance with 47 C.F.R. §§ 54.500, *et seq.*

iv. <u>Starlink Services Will Offer Broadband Internet</u> Access Services.

Pursuant to 47 C.F.R. § 54.101(a)(2), Starlink Services will offer broadband internet access service with the capability to transmit data to, and receive data by wire or radio from, all or substantially all internet endpoints, including any capabilities that are incidental to and enable the operation of the communications service, but excluding dial-up service. Starlink Services will offer broadband at rates that are reasonably comparable to rates offered in urban areas.

v. <u>Starlink Services Will Provide Lifeline to Qualified</u> Low-Income Consumers.

As required by 47 C.F.R. § 54.405, Starlink Services will provide Lifeline to qualifying low-income consumers and publicize the availability of Lifeline service in a manner reasonably designed to reach those likely to qualify for the service.

vi. <u>Starlink Services Will Advertise the Availability of Supported Services.</u>

Pursuant to 47 U.S.C. § 214(e)(2) and 47 C.F.R. § 54.201(d), Starlink Services will advertise the availability and rates of each of the supported services detailed above and the availability of Lifeline benefits throughout its ETC Service Area by media of general distribution.

vii. Starlink Services Will Comply with the Service and Performance Requirements Applicable to the Support It Receives.

Pursuant to 47 C.F.R. § 54.202(a)(1)(i), Starlink Services will comply with the service and performance requirements applicable to the support that it receives, including the

performance requirements and deployment milestones associated with RDOF support.¹⁷ Further, Starlink Services will comply with all applicable state and federal consumer protection and service quality standards associated with the receipt of RDOF support.

viii. Starlink Services Will Remain Functional In Emergency Situations.

Pursuant to 47 C.F.R. § 54.202(a)(2), Starlink Services will have sufficient backup power to remain functional without an external power source in emergency situations, will be
able to reroute traffic around damaged facilities, and will be able to manage traffic spikes
resulting from emergency situations. At the user level, Starlink Services will offer a 24-hour
battery back-up option for user equipment that will provide the ability to make phone calls in the
event of a power outage. At the system level, Starlink Services is building redundancy into the
network. For example, every user will have multiple satellites in view with which the end user
can communicate. Additionally, every satellite will have multiple gateway sites in view with
which it can communicate. The Starlink traffic routing system ensures that every user is served
with bandwidth before users demanding more bandwidth get additional throughput assigned,
which gives the Starlink network robustness in the event of emergencies requiring high
throughput.

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¹⁷ Starlink Services notes that the FCC has waived the requirements to: (1) submit a five-year plan per 47 C.F.R. § 54.202(a)(1)(ii); and (2) demonstrate that it will satisfy applicable consumer protection and service quality standards per 47 C.F.R. § 54.202(a)(3). The FCC waived these requirements because "the Commission adopted more specific measures to track deployment, including annual reporting of service to geocoded locations and certification of compliance with benchmark milestones" and "such obligations were no longer essential to the Commission's ability to monitor ETC use of support for its intended purpose." *FCC ETC Procedures Notice* at 4-5. Consistent with the FCC's findings, Resolution T-17693 concludes that the requirement for StarLink Services to have a suitable plan to build-out its network and provide service will be satisfied by the RDOF program's service milestones, which the FCC will monitor to assure proper progress in meeting deployment obligations. Accordingly, Starlink Services understands that a five-year service plan is not required in connection with requests for ETC designation relating to the RDOF program.

ix. Starlink Services Is Not Subject to a Denial of Federal Benefits Under the Anti-Drug Abuse Act of 1988.

Pursuant to 47 C.F.R. § 1.2002, Starlink Services is not subject to a denial of federal benefits pursuant to section 5301 of the Anti-Drug Abuse Act of 1988, as implemented in the Commission's rules.

c. Starlink Services Meets All State Requirements for ETC Designation.

Starlink Services further satisfies the requirements of Resolution T-17002 to the extent not already described above.

i. ETC Service Area Map

Starlink Services provides a map of the proposed ETC Service Area at Exhibit $\mathrm{H}.^{18}$

ii. <u>Lifeline Disconnection</u>

Starlink Services will only disconnect Lifeline services pursuant to the rules and procedures established by the FCC and, if applicable, the Commission.

iii. Commitment to Provide Service.

Starlink Services will provide service in the ETC Service Area consistent with the deployment milestones adopted by the FCC for RDOF recipients. Specifically, Starlink Services will commercially offer voice and broadband service consistent with the speed and latency requirements of its winning bids to 40% of the number of awarded locations by the end of the third full calendar year following funding authorization, and 20% each year thereafter, resulting

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¹⁸ Starlink Services is providing the map in .pdf format and will separately provide the map in .shp file upon request.

in 100% deployment to funded locations by the end of the sixth calendar year ¹⁹ Consistent with the FCC's rules governing RDOF, once a milestone has been met, Starlink Services will provide voice and/or broadband service to the requisite number locations, or will be able to provide such service within 10 business days upon request. ²⁰ As specified in Resolution T-17002, if Starlink Services determines that it cannot serve a customer once an RDOF milestone has been met, then Starlink Services will report the unfulfilled request within 30 days after making such determination.

iv. Two-Year Plan

Starlink Services understands that the requirement to submit a two-year service plan is not required in connection with requests for ETC designation relating to the RDOF program. Instead, as explained in Resolution T-17693, the requirement for the Company to have a suitable plan to build-out its network and provide service will be satisfied by the RDOF program's service milestones, which the FCC will monitor to assure proper progress in meeting deployment obligations. Indeed, Starlink Services is subject to strict deployment, performance and other compliance obligations that will be sufficient to ensure that Starlink Services deploys RDOF-supported service in a timely manner and that RDOF support is used only for its intended purpose. Starlink Services certifies that the investments made and expenses paid in connection with RDOF deployment will be incurred to maintain and provide telecommunication services to any customer requesting service in the ETC Service Area.

¹⁹ See Rural Digital Opportunity Fund Order para. 45.

²⁰ See id. para. 54 ("We conclude that a support recipient will be deemed to be commercially offering voice and/or broadband service to a location if it provides service to the location or could provide it within 10 business days upon request.")

²¹ Rural Digital Opportunity Fund Order paras. 35-45.

v. Consumer Protection

As observed in Resolution T-17693, the consumer protection requirement will be satisfied by the RDOF program's specific service quality standards and performance quality requirements. The Starlink Services confirms that it will meet those standards and requirements as well as comply with all other applicable state and federal consumer protection rules and service quality reporting requirements

vi. Equal Access

FCC rules for ETC designation no longer require ETC applicants to commit to providing equal access if all other carriers in the designated ETC area relinquish their ETC status.

(5) Designating Starlink Services as an ETC is in the Public Interest.

Expedited designation of Starlink Services as an ETC in the proposed ETC Service Area in California will serve the public interest by ensuring that Starlink Services is eligible to receive federal USF support, including the RDOF support it won through the auction, and expand broadband coverage in and throughout the ETC Service Area. As described above, Starlink Services has been provisionally awarded \$885 million in federal support over ten years in 35 states. In California, Starlink Services has been provisionally awarded \$5,746,960, which will directly benefit residents in the ETC Service Area. As noted, the FCC has determined that the voice and broadband services Starlink Services will deploy through RDOF support will advance the goal of RDOF to "ensure continued and rapid deployment of broadband networks to unserved Americans." RDOF support will allow Starlink Services to accelerate service for those who need it most and prioritize deployment to the underserved in the Service Area.

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 $^{^{22}\} RDOF\ Auction\ Procedures\ PN\ para.\ 5.$

Specifically, ETC designation will benefit users in California by enabling Starlink Services to utilize RDOF support to take the following actions:

Accelerate production of satellites and customer premises equipment. RDOF support will allow Starlink Services to accelerate production of its satellites and customer premises equipment. This additional production will result in an acceleration of capacity deployment and more terminals at lower cost for those living in underserved areas.

Targeted gateway deployment. Starlink Services is already deploying an extensive gateway infrastructure network designed to allow service in major markets across the country. Yet, the same market forces that drive the placement of these gateways also drive the deployment of purely terrestrial networks. With RDOF support, Starlink Services will be able to activate gateway sites in thinly populated areas of the country where their use could not otherwise be justified. This support would mean faster deployment and better service for people in otherwise underserved areas.

Dynamic allocation of capacity. RDOF support will allow Starlink Services to allocate dynamically deployable capacity to the underserved areas that need it most. Under the terms of the RDOF program, Starlink Services will hold back a portion of its system capacity that could otherwise be sold to locations outside of the RDOF program, so that high-quality internet service can be provisioned to supported locations in the Service Area that do not currently have access to 25/3 Mbps broadband service within ten days of receipt of any order.

XIX. <u>CONCLUSION</u>

As shown in this Application, Starlink Services is fully qualified to operate as: (i) a full facilities-based and resale competitive local exchange carrier throughout the service territories of Pacific Bell Telephone Company, Frontier California, Inc., Frontier Communications of the Southwest, Inc., Consolidated Communications of California Company,

and Citizens Telecommunications Company of California, Inc.; and (ii) a full facilities-based and resale interexchange carrier on a statewide basis, and also satisfies all state and federal requirements for ETC designation in the ETC Service Area. Furthermore, granting the requested operating authority and designating Starlink Services as an ETC for purposes of receiving RDOF support is in the public interest because it will enable Starlink Services to receive support that will facilitate rapid deployment of broadband and VoIP service to the ETC Service Area in California at speeds and latency comparable to terrestrial systems in urban locations. Therefore, Starlink Services respectfully requests that the Commission approve this Application by June 7, 2021.

Respectfully submitted March 15, 2021 at San Francisco, California.

GOODIN, MACBRIDE, SQUERI & DAY, LLP John L. Clark 505 Sansome Street, Suite 900 San Francisco, California 94111 Telephone: (415) 392-7900 Facsimile: (415) 398-4321

Email: jclark@goodinmacbride.com

By /s/ John L. Clark
John L. Clark

Attorneys for Starlink Services, LLC

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VERIFICATION

I, R. Edward Price, am Senior Counsel of Space Exploration Technologies Corp., the parent of Starlink Services, LLC ("Applicant"), and am authorized to make the following verification on its behalf:

I affirm that Applicant:

- agrees to comply with all federal and state statutes, rules, and regulations, for a
 Certificate of Public Convenience and Necessity (CPCN) and state contractual
 rules and regulations, if granted the request as stated in this Application;
- certifies that all information in the foregoing Application for a CPCN is true and correct;
- agrees, that in the event its request for a CPCN is granted, Applicant will post a continuous performance bond (i.e., there will be no termination date on the bond) in the amount of \$25,000 issued by a corporate surety company authorized to transact surety business in California, and with the Commission listed as the obligee on the bond; and, further, that Applicant will provide a copy of the executed performance bond to the Director of the Communications Division with the written notification to the Commission of acceptance of operating authority;
- Applicant will operate as an interstate common carrier as defined in section 153
 of the Federal Communications Act of 1934, as amended, (the "Act"), and will
 be eligible to interconnect with the public switched telephone network pursuant
 to sections 251 and 252 of the Act; and

 If granted a CPCN, Applicant will operate as a telephone corporation as defined in Section 234(a) of the California Public Utilities Code (Code) and obey the Code, and all of the Commission's rules, decisions and orders applicable to telephone corporations.

I affirm and declare under penalty of perjury under the laws of the State of California, including Rule 1.1 of the California Public Utilities Commission's Rules of Practice and Procedure, that, to the best of my knowledge, all of the statements and representations made in this Application are true and correct.

Dated: March 15, 2021

R. Edward Price

Mbbl Pm

EXHIBIT A

RESUMES

Elon Musk

Elon Musk currently leads SpaceX, Tesla, Neuralink and The Boring Company. Previously, Elon co-founded and sold PayPal, the world's leading Internet payment system, and Zip2, one of the first internet maps and directions services.

Space Exploration Technologies Corp.

As the founder and Chief Engineer at SpaceX, Elon oversees the development of rockets and spacecraft for missions to Earth orbit and ultimately to other planets. In 2008, the SpaceX Falcon 1 was the first privately developed liquid fuel rocket to reach orbit, and SpaceX made further history in 2017 by re-flying both a Falcon 9 rocket and Dragon spacecraft for the first time. Falcon Heavy, the most powerful operational rocket in the world by a factor of two, completed its first flight in 2018. In May 2020, SpaceX returned America's ability to fly NASA astronauts to space on American vehicles for the first time since 2011. In addition to carrying astronauts to space for NASA, SpaceX's Dragon spacecraft can also carry private passengers to Earth orbit, the ISS or beyond. Building on these achievements, SpaceX is developing Starship – a fully reusable transportation system that will carry crew and cargo to the Moon, Mars and beyond – and Starlink, which will deliver high speed broadband internet to locations where access has been unreliable, expensive, or completely unavailable. By pioneering reusable rockets and the world's most technologically advanced spacecraft, SpaceX is pursuing the long-term goal of making humans a multi-planet species by creating a self-sustaining city on Mars.

Tesla Motors, Inc.

As the co-founder and CEO of Tesla, Elon leads all product design, engineering and global manufacturing of the company's electric vehicles, battery products and solar energy products. Since the company's inception in 2003, Tesla's mission has been to accelerate the world's transition to sustainable energy. The first Tesla product, the Roadster sports car, debuted in 2008, followed by the Model S sedan, which was introduced in 2012, and the Model X SUV, which launched in 2015. Model S received Consumer Reports' Best Overall Car and has been named the Ultimate Car of the Year by Motor Trend, while Model X was the first SUV ever to earn 5-star safety ratings in every category and sub-category in the National Highway Traffic Safety Administration's tests. In 2017, Tesla began deliveries of Model 3, a mass-market electric vehicle with more than 320 miles of range, and unveiled Tesla Semi, which is designed to save owners at least \$200,000 over a million miles based on fuel costs alone. In 2019, Tesla unveiled Cybertruck, which will have better utility than a traditional truck and more performance than a sports car, as well as the Model Y compact SUV, which began customer deliveries in early 2020.

Tesla also produces three energy storage products, the Powerwall home battery, the Powerpack commercial-scale battery, and Megapack, which is designed for utility-scale installations. In 2016,

Tesla became the world's first vertically-integrated sustainable energy company with the acquisition of SolarCity, the leading provider of solar power systems in the United States, and in 2017 released Solar Roof – a beautiful and affordable energy generation product.

Neuralink

Elon is also CEO of Neuralink, which is developing ultra-high bandwidth brain-machine interfaces to connect the human brain to computers.

The Boring Company

He also launched The Boring Company, which combines fast, affordable tunneling technology with an all-electric public transportation system in order to alleviate soul-crushing urban congestion and enable high-speed, long-distance travel. The Boring Company built a 1.15 mile R&D tunnel in Hawthorne, and is currently constructing Vegas Loop, a public transportation system at the Las Vegas Convention Center.

Gwynne Shotwell

President & COO

As President and COO of SpaceX, Gwynne Shotwell is responsible for day-to-day operations and managing all customer and strategic relations to support company growth. She joined SpaceX in 2002 as Vice President of Business Development and built the Falcon vehicle family manifest to more than 100 launches, representing more than \$15 billion in business. Shotwell is a member of the SpaceX Board of Directors.

Prior to joining SpaceX, Shotwell spent more than 10 years at the Aerospace Corporation, holding positions in Space Systems Engineering, Technology and Project Management. She was promoted to the role of Chief Engineer of an MLV-class satellite program, managed a landmark study for the Federal Aviation Administration on commercial space transportation, and completed an extensive analysis of space policy for NASA's future investment in space transportation.

In addition to being included on Time's 100 Most Influential People of 2020, Shotwell was awarded the 2020 Von Karmen Wings award. In 2018 Shotwell was named the Satellite Executive of the Year and she was awarded the AIM Goddard Astronautics Awards as well as the American Society of Mechanical Engineers Ralph Coats Roe Medal. Fortune Magazine placed Shotwell at #42 on their list of the World's 50 Greatest Leaders in 2018 and Forbes named her #55 on their list of Power Women in 2019. Gwynne was inducted into the National Academy of Engineering in 2020 and in 2019 was appointed to the National Space Council Users' Advisory Group In 2014, Shotwell was appointed to

the United States Export Import Bank's Advisory Committee and the Federal Aviation Administration's Management Advisory Council. Shotwell was elected to the honorable grade of Fellow with the American Institute of Aeronautics and Astronautics.

Through leadership in both corporate and external science, technology, engineering and math (STEM) programs, Shotwell has helped raise over \$1.8 million for STEM programs reaching thousands of students nationwide.

Shotwell received, with honors, her bachelor's and master's degrees from Northwestern University in Mechanical Engineering and Applied Mathematics, and serves on their Board. She has authored dozens of papers on a variety of space related subjects.

David Goldman

Director, Satellite Policy

David Goldman is the Director of Satellite Policy for SpaceX. Prior to joining SpaceX, he was the Chief Counsel for the Communication and Technology Subcommittee since January 2015. Before that, he served as the Senior Legal Advisor for FCC Commissioner Jessica Rosenworcel. He was the Commissioner's chief advisor on wireless, international, and public safety issues, along with responsibility for other issues of policy, strategy, public relations, and office operations. David joined Commissioner Rosenworcel's office from the United States Senate Committee on Commerce, Science, and Transportation, where he served on detail as Counsel to the Subcommittee on Communications, Technology, and the Internet.

Prior to serving on Capitol Hill, David served in a number of positions at the FCC, including in the office of Chairman Genachowski and as a Policy Advisor to the Chief of the Wireless Telecommunications Bureau. He joined the agency as an Honors Attorney, serving as Attorney Advisor in the Spectrum Competition and Policy Division of the Wireless Telecommunications Bureau. Before this, he served as Staff Law Clerk at the United States Court of Appeals for the Seventh Circuit in Chicago. He also worked as an associate at the law firm Hughes Hubbard & Reed in New York.

He received his law degree from the University of Pennsylvania and his undergraduate degree from the University of Florida.

Mark Juncosa

Mark Juncosa joined SpaceX in 2005, and currently serves as VP of Vehicle Engineering, and is primarily focused on Starlink engineering.

Mark attended Cornell University, earning a Bachelor's degree in Economics and a Master's degree in Systems Engineering. Upon graduation, Mark joined SpaceX. His first role at SpaceX was as a Structures Engineer working on the Friction Stir Welding machine. Mark transitioned into a leadership position by first tackling Dragon Structures. His scope expanded to include Falcon, and also ushered in the change to an integrated Vehicle Engineering organization. Most recently, he has focused on leading the communication satellite constellation (Starlink).

Richard Lee

Senior Director, Tax & Treasury

Richard Lee is the Senior Director of Tax and Treasury for SpaceX and as such leads the tax and treasury functions for the company. Richard has over 20 years of experience in the financial services and tax field, having previously been a Partner at PwC's Banking and Capital Markets Practice. He has also previously served as Vice President at International Lease Finance Corporation, Senior Vice President at Macquarie Capital (USA) Inc., and Managing Director in KPMG's Financial Services Practice in variety of tax and finance positions in New York and Los Angeles.

Richard received his B.A. in Business Economics from University of California Los Angeles, J.D. from Loyola Law School, LL.M. in Taxation from New York University School of Law, and M.B.A. in Finance from The Wharton School at University of Pennsylvania. He is a certified public accountant and a member of the California State Bar.

Ted Price

Senior Counsel, Telecommunications

Ted Price is Senior Counsel, Telecommunications for SpaceX. He is responsible for regulatory compliance matters for SpaceX's Starlink satellite internet service in the United States and internationally. Prior to joining SpaceX, Ted was Assistant General Counsel for CenturyLink (now Lumen Technologies) and two of its predecessor companies, Level 3 Communications and Global Crossing. He has extensive experience handling federal, state and international telecommunications regulatory matters, global policy issues and complex transactions such as interconnection agreements and internet peering agreements. Prior to his in-house positions, Ted was an attorney with the Washington, DC, office of Vinson & Elkins, where he represented telecommunications carriers from around the world in a wide range of transactions and regulatory matters.

Ted holds a Juris Doctor degree from the George Washington University Law School, where he was an editor of The George Washington Journal of International Law and Economics, and a Master of Laws degree in international law from Cambridge University. He holds an undergraduate degree in political science and sociology from the University of Massachusetts Amherst. He is admitted to practice law in New York, Massachusetts, the District of Columbia and before the U.S. Court of Appeals for the District of Columbia Circuit.

EXHIBIT B

SWORN STATEMENT

- 1. I affirm that, to the best of my knowledge after due inquiry, except as set forth in paragraph 3 below, neither Applicant, any of its Affiliates (as defined in paragraph 4 below), officers, directors, partners, agents, or owners (directly or indirectly) of more than 10% of Applicant, nor anyone acting in a management capacity for Applicant: (a) held one of these positions with a company that filed for bankruptcy; (b) been personally found liable, or held one of these positions with a company that has been found liable, for fraud, dishonesty, failure to disclose, or misrepresentations to consumers or others; (c) been convicted of a felony; (d) been to my knowledge the subject of a criminal referral by judge or public agency; (e) had a telecommunications license or operating authority denied, suspended, revoked, or limited in any jurisdiction; (f) personally entered into a settlement, or held one of these positions with a company that has entered into settlement of criminal or civil claims involving violations of sections 17000 et seq., 17200 et seq., or 17500 et seq. of the California Business & Professions Code, or of any other statute, regulation, or decisional law relating to fraud, dishonesty, failure to disclose, or misrepresentations to consumers or others; or (g) been found to have violated any statute, law, or rule pertaining to public utilities or other regulated industries; or (h) entered into any settlement agreements or made any voluntary payments or agreed to any other type of monetary forfeitures in resolution of any action by any regulatory body, agency, or attorney general.
- 2. I affirm that, to the best of my knowledge after due inquiry, except as set forth in paragraph 3 below, neither Applicant, any Affiliate, officer, director, partner, or owner of

more than 10% of Applicant, nor any person acting in such capacity whether or not formally appointed, is being or has been investigated by the Federal Communications Commission or any law enforcement or regulatory agency for failure to comply with any law, rule or order.

- 3. Elon Musk (i) owns more than 10% and (ii) serves as Chief Executive Officer of Applicant's parent company, Space Exploration Technologies Corp. ("SpaceX"). Mr. Musk is also the Chief Executive Officer of Tesla, Inc. ("Tesla"). Tesla is a publicly traded company that is entirely separate from SpaceX. It is my understanding that on September 27, 2018, the Securities and Exchange Commission ("SEC") filed a civil complaint against Mr. Musk alleging that certain statements made by him in connection with Tesla violated Section 10(b) of the Securities Exchange Act of 1934. The complaint did not relate to SpaceX or Applicant. On September 29, 2018, Mr. Musk entered into an agreement to resolve the SEC complaint without admitting or denying its allegations. The agreement was approved, and on October 16, 2018, the court entered a final judgment based on its terms.
- 4. As used herein, the term "Affiliate" means any entity that is a provider of telecommunications and/or internet access services and in which a holder of 10% or greater direct or indirect voting control also holds 10% or greater direct or indirect voting control of Applicant
- 5. I affirm and declare under penalty of perjury under the laws of the State of California, including Rule 1.1 of the California Public Utilities Commission's Rules of Practice and Procedure, that, to the best of my knowledge, the foregoing and all other statements and representations made in the Application are true and correct.

Dated: March 15, 2021

R Edward Price

EXHIBIT C

ORGANIZATION AND QUALIFICATION TO CONDUCT BUSINESS

Page 1



I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF

DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT

COPY OF THE CERTIFICATE OF FORMATION OF "STARLINK SERVICES,

LLC", FILED IN THIS OFFICE ON THE TWENTY-FIRST DAY OF DECEMBER,

A.D. 2020, AT 11:09 O'CLOCK A.M.



Authentication: 204377959

Date: 12-21-20

4503816 8100 SR# 20208712090

CERTIFICATE OF FORMATION OF STARLINK SERVICES, LLC

TO THE SECRETARY OF STATE OF THE STATE OF DELAWARE:

The undersigned, an authorized natural person, for the purpose of forming a limited liability company, under the provisions and subject to the requirements of the State of Delaware (particularly Chapter 18, Title 6 of the Delaware Code and the acts amendatory thereof and supplemental thereto, and known, identified, and referred to as the "Delaware Limited Liability Company Act"), hereby certifies that:

I.

NAME

The name of the limited liability company is STARLINK SERVICES, LLC (the "Company").

II.

INITIAL REGISTERED OFFICE AND REGISTERED AGENT

The address of the registered office and the name and address of the registered agent of the limited liability company required to be maintained by Section 18-104 of the Delaware Limited Liability Company Act are Corporation Service Company, 251 Little Falls Drive, City of Wilmington, County of New Castle, State of Delaware 19808.

IN WITNESS WHEREOF, the undersigned authorized agent of the Company has executed this Certificate of Formation as of December 21, 2020.

Michael Sagan

Authorized Person

State of Delaware Secretary of State Division of Corporations Delivered 11:09 AM 12/21/2020 FILED 11:09 AM 12/21/2020 SR 20208712090 - File Number 4503816



I, SHIRLEY N. WEBER, Ph.D., Secretary of State of the State of California, hereby certify:

Entity Name:

STARLINK SERVICES, LLC

California Name:

STARLINK SERVICES, LLC

File Number:

202100410970

Registration Date:

12/29/2020

Entity Type:

FOREIGN LIMITED LIABILITY COMPANY

Jurisdiction:

DELAWARE

Status:

ACTIVE (GOOD STANDING)

As of February 22, 2021 (Certification Date), the entity is qualified to transact intrastate business in California.

This certificate relates to the status of the entity on the Secretary of State's records as of the Certification Date and does not reflect documents that are pending review or other events that may affect status.

No information is available from this office regarding the financial condition, status of licenses, if any, business activities or practices of the entity.



IN WITNESS WHEREOF, I execute this certificate and affix the Great Seal of the State of California this day of February 23, 2021.

SHIRLEY N. WEBER, Ph.D. Secretary of State

Certificate Verification Number: YWQPMWY

To verify the issuance of this Certificate, use the Certificate Verification Number above with the Secretary of State Certification Verification Search available at bebizfile.sos.ca.gov/certification/index.

EXHIBIT D

PROPONENT'S ENVIRONMENTAL ASSESSMENT

Starlink Services intends to install satellite gateways (earth stations) and telecommunications facilities (such as conduit and fiber optic cabling) for middle-mile terrestrial transport of communications, including VoIP and broadband data, to and from consumers of its satellite-based services. Starlink Services expects that any outside plant construction would be relatively small in scale and would occur in previously-developed and disturbed areas.

As the Commission has recognized in similar cases, it can be expected that such projects would fall within one or more categorical exemptions under CEQA. *See, e.g.,* Decision 13-07-032, which granted full-facilities-based authority to Vodex Communications Corporation, subject to compliance with an expedited 21-day environmental review process.

To assure that there would be no significant adverse environmental impacts from any such construction, Starlink Services will follow the procedure described in Decision 13-07-032 to establish whether or not CEQA exemptions apply. This procedure is described in Section VII of this Application. If a determination is made that the proposed construction is not exempt, Starlink Services would file a new application for approval of the contemplated project.

Starlink Services submits that the foregoing process assures that it can be seen with certainty that there is no possibility that grant of the instant application may have a significant adverse effect on the environment.

EXHIBIT E

SERVICE AREA MAP

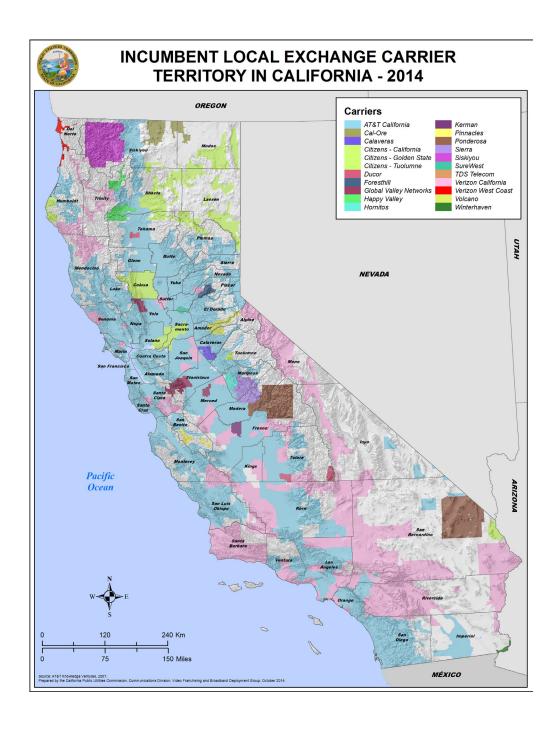


EXHIBIT F

FINANCIAL SHOWING

CONFIDENTIAL

[FILED UNDER SEAL]

EXHIBIT G

ETC SERVICE AREA CENSUS BLOCKS

80010081001025	80010085232254	80010087093043	80010150002002	80050067122000
80010081001029	80010085232262	80010088011001	80010150002004	80050068551030
80010081001031	80010085232272	80010088011066	80010150002016	80050068552024
80010081001033	80010085232278	80010088011067	80010150002038	80050068552036
80010081001034	80010085232279	80010088021020	80010150002099	80050068552043
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EXHIBIT H

ETC SERVICE AREA MAP

